

ABSTRACT

The invention provides a polymer composition containing an addition polymerization-based block copolymer (a), an acrylic resin (b), and a softener (c), wherein the addition polymerization-based block copolymer (a) has a weight average molecular weight of 30000 to 200000 and is at least one selected from block copolymers comprising at least one polymer block A and at least one polymer block B, and hydrogenated products of the block copolymers; the polymer block A essentially comprises an aromatic vinyl compound unit containing at least 1% by mass of an alkylstyrene-derived structural unit (I) in which at least one alkyl group having 1 to 8 carbon atoms is bound to a benzene ring; the block copolymer B comprises a conjugated diene compound unit; and the components of the polymer composition are present in respective proportions (by mass) so that the following relationships (1) and (2) hold:

$$0.05 \leq W_b/W_a \leq 2 \quad (1)$$

$$W_c/(W_a+W_b+W_c) \leq 0.5 \quad (2)$$

where W_a , W_b , and W_c are the amounts (by mass) of the components of the polymer composition: the addition polymerization-based block copolymer (a), the acrylic resin (b) and the softener (c), respectively.

Not only does the polymer composition of the present invention offer various advantageous properties, including moldability, flexibility, rubber elasticity, mechanical properties, and transparency, but it also exhibits
5 superior scratch resistance and superior abrasion resistance, which make the polymer composition suitable for use in various applications.

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- (51) 国際特許分類⁷: C08L 53/00, 33/00 3 6 番地 株式会社クラレ内 Ibaraki (JP). 前田 瑞穂 (MAEDA,Mizuho) [JP/JP]; 〒314-0197 茨城県 鹿島郡 神栖町東和田 3 6 番地 株式会社クラレ内 Ibaraki (JP).
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- (71) 出願人 (米国を除く全ての指定国について): 株式会社クラレ (KURARAY CO., LTD.) [JP/JP]; 〒710-8622 岡山県 倉敷市 酒津 1 6 2 1 番地 Okayama (JP).
- (72) 発明者; および
- (75) 発明者/出願人 (米国についてのみ): 鈴木 憲司 (SUZUKI,Kenji) [JP/JP]; 〒314-0197 茨城県 鹿島郡 神栖町東和田 3 6 番地 株式会社クラレ内 Ibaraki (JP). 小鷹 昭広 (KOTAKA,Akihiro) [JP/JP]; 〒314-0197 茨城県 鹿島郡 神栖町東和田 3 6 番地 株式会社クラレ内 Ibaraki (JP). 社地 賢治 (SHACHI,Kenji) [JP/JP]; 〒314-0197 茨城県 鹿島郡 神栖町東和田

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(54) Title: POLYMER COMPOSITION

(54) 発明の名称: 重合体組成物

(57) Abstract: A polymer composition comprising at least one addition polymer type block copolymer (a) having a weight-average molecular weight of 30000 to 200000 which is selected from among block copolymers each comprising one or more polymer block (A) composed mainly of aromatic vinyl units containing at least 1% by mass of structural units (I) derived from an alkylstyrene having at least one C₁₋₈ alkyl group bonded to the benzene ring and one or more polymer block (B) composed mainly of conjugated diene units and products of hydrogenation of the block copolymers, an acrylic resin (b), and a softener (c) in proportions (by mass) satisfying the relationships [1] and [2]: $0.05 \leq W_b/W_a \leq 2$ [1] $W_c/(W_a + W_b + W_c) \leq 0.5$ [2] [wherein W_a, W_b, and W_c are the contents (by mass) of the block copolymer (a), the acrylic resin (b), and the softener (c)]. The polymer composition is excellent in processability in molding, softness, rubber elasticity, mechanical characteristics, and transparency as well as in mar resistance and wear resistance, thus being effectively usable in a wide field by virtue of such properties.

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